

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Effects of Communications Towers on)	WT Docket No. 03-187
Migratory Birds)	
_____)	

SPRINT COMMENTS

Sprint Corporation, on behalf of its wireless operating division, (“Sprint”)¹, submits these comments in response to the Notice of Inquiry that the Commission commenced to “gather comment and information on the impact that communications towers may have on migratory birds.”²

Sprint applauds the Commission for initiating this inquiry in an effort to obtain scientific facts concerning the effects of communications towers on migratory birds.³ The Commission is on the right track by asking whether there is a problem and, if so, whether there are measures documented by scientific studies that would mitigate the problem. Without development of core facts in this area, the Commission cannot possibly proceed with any new regulations or even determine whether new rules in this area would achieve the stated objective of protecting

¹ In addition to its PCS operations, the wireless operating division of Sprint includes Sprint Sites USA, a business unit created to market, manage and maintain the Company’s substantial portfolio of communications towers.

² See *Effects of Communications Towers on Migratory Birds*, WT Docket No. 03-187, *Notice of Inquiry*, FCC 03-205, at ¶ 1 (Aug. 20, 2003), summarized in 68 Fed. Reg. 53696 (Sept. 12, 2003) (“*Migratory Bird NOI*”).

³ As one wildlife ecologist is reported to have said, “When it comes to understanding tower kills, we’re just like the birds – groping around in the dark.” David Malakoff, Audubon Magazine, *Faulty Towers* (Oct. 2001)(quoting Ron Larkin of the Illinois Natural History Survey), available at http://magazine.audubon.org/fea-tures0109.faulty_towers.html.

migratory birds. Therefore, the FCC must proceed with extreme caution in order to avoid imposing unnecessary obligations and costs on companies that provide critical infrastructure for the nation's communications networks.

As in all areas related to the siting of communications towers, the Commission should be doing all it can to encourage and promote the rapid deployment of ubiquitous facilities. Wireless providers like Sprint strive to offer reliable, quality service to as many subscribers as possible. Indeed the hyper-competitive wireless marketplace absolutely requires that companies compete on issues such as coverage – a factor dependent on a provider's ability to deploy tower facilities. As such, every additional requirement or obstacle that regulatory authorities impose in this area directly impacts the ability of such providers to offer consumers the highest quality service possible.

Moreover, as the Commission is aware, Congress has expressed concern about “dead zones” in wireless networks where wireless calls “cannot be transmitted due to the absence of a nearby cellular or [PCS] antenna.”⁴ In this regard, Congress explicitly found that “the construction and operation of seamless, ubiquitous, and reliable wireless telecommunications systems promote public safety and provide immediate and critical communications links among members of the public.”⁵ Accordingly, any siting related measures that might delay or hinder the deployment of wireless infrastructure must demonstrably serve the public interest.

⁴ H.R. Rep. No. 1-6-25, 106th Cong., 1st Sess., at 4-5 (1999).

⁵ Wireless Communications and Public Safety Act of 1999, Public Law No. 106-81, 113 Stat. 3 at § 2(a)(6).

I. THERE IS NO EVIDENCE THAT COMMUNICATIONS TOWERS ARE A SIGNIFICANT CAUSE OF BIRD MORTALITY

If the Commission were to rely on the assertions put forth by certain parties engaged in this proceeding, it would be left with the impression that communications towers are a major cause of death for migratory birds and that this fact has been established by reliable scientific evidence. As one commenter recently asserted:

We should not need further studies. If we want to keep birds alive, and we do, we know that structures like communication towers are a problem. . . . Birds are used to all kinds of weather. It is the towers that kill them.⁶

Similarly, a few environmental organizations have taken the unequivocal position that communications towers are “a significant and continuing source of mortality to birds.”⁷ Available science, however, does not support these sweeping assertions.

Sprint does not dispute that some migratory birds are killed by some communications towers – as is the case with any structure located at a certain height -- especially during inclement weather. Sprint further agrees that additional research, using a scientifically rigorous protocol, is needed in order to understand fully (1) whether certain communications towers are a significant hazard and (2) if so, whether there are reasonable steps tower owners can take to minimize incidents of avian mortality. *Based on existing data, however, one cannot reasonably conclude that communications towers are the major problem – or even a major problem – facing the migratory bird population, or that additional regulations are needed in this area.*

The U.S. Fish and Wildlife Service (“FWS”) estimates that “a minimum of 10 billion birds breed in North America,” and that fall populations “may be on the order of 20 billion.”⁸

⁶ Sachau Comments at 1-2 (filed Sept. 23, 2003).

⁷ Forest Conservation Council, Friends of the Earth, and the American Bird Conservancy, Petition for a Writ of Mandamus, No. 03-1034, at 8 (D.C. Cir., Feb. 13, 2003).

Dr. Albert Manville of FWS' Division of Migratory Bird Management estimates that "4-5 million birds are killed per year due to collisions with communications towers."⁹ Although Sprint has no way to evaluate the accuracy of these estimates,¹⁰ the fact remains that even according to FWS figures the impact of communications towers on birds is not significant. More specifically, extrapolating from FWS estimates, communications towers kill one of every 2,000 to 4,000 migratory birds each year.¹¹

The alleged "communications tower problem" must, moreover, be placed in perspective. Again, using estimates provided by FWS:

- Building windows are estimated to cause between 97 to 970 million collision deaths – *or from 20 to 200 times the number of estimated collision deaths from communications towers.*¹²
- Power transmission lines are estimated to kill up to 174 million birds annually – *or 35 times the number of estimated collision deaths from communications towers.*¹³
- Pesticides are estimated to cause at least 72 million deaths annually – *or 14 times the number of estimated deaths caused by communications tower collisions.*¹⁴
- Cars are estimated to kill 60 million birds or more each year – *or 12 times the number of estimated deaths caused by communications tower collisions.*¹⁵

⁸ See FWS, *Migratory Bird Mortality: Many Human Caused Threats Afflict Our Bird Populations*, at 1 (Jan. 2002) ("FWS Migratory Bird Mortality").

⁹ Albert M. Manville, FWS, *The ABCs of Avoiding Bird Collisions at Communications Towers: the Next Steps* (Dec. 1999) ("Manville Tower Collision ABCs").

¹⁰ It is notable that FWS estimates range dramatically. FWS has referred to the 4-5 million estimate as "conservative" and states that the mortality rate is "possibly closer to 40 to 50 million." FWS provides no support for this stunning range of figures but suggests that a nationwide cumulative impacts study should help resolve this question. See *FWS Migratory Bird Mortality* at 2.

¹¹ Sprint bases this and the following figures on FWS' "conservative" estimate that communications towers kill 4 to 5 million birds annually. See *FWS Migratory Bird Mortality* at 2.

¹² See *Manville Tower Collision ABCs*.

¹³ *FWS Migratory Bird Mortality* at 2.

¹⁴ *Id.*

¹⁵ *Id.*

Indeed, a “recent study in Wisconsin estimates that in that state alone, domestic cats kill roughly 39 million birds annually.”¹⁶ Put another way, the cats of Wisconsin are estimated to kill eight times more birds than all the communications towers nationwide.

As discussed above, Sprint cannot verify the accuracy of the statistics cited by FWS. Assuming *arguendo*, however, that these figures are accurate, the impact of communications towers on birds pales in comparison to numerous facets of modern life. FWS’ figures suggest that automobiles, buildings and pets all kill far more birds than communications towers.

The negligible impact of communications towers on avian mortality is also supported by the studies undertaken by one of the nation’s preeminent avian experts, Paul Kerlinger.¹⁷ Based on data compiled through his own research and the review of other research, including a literature review commissioned by FWS,¹⁸ Dr. Kerlinger estimates that *communications towers are responsible for less than one percent of all bird fatalities*.¹⁹ As the following graph aptly illustrates, the impact of communications towers on bird fatalities is miniscule compared to such “hazards” as windows and cats:

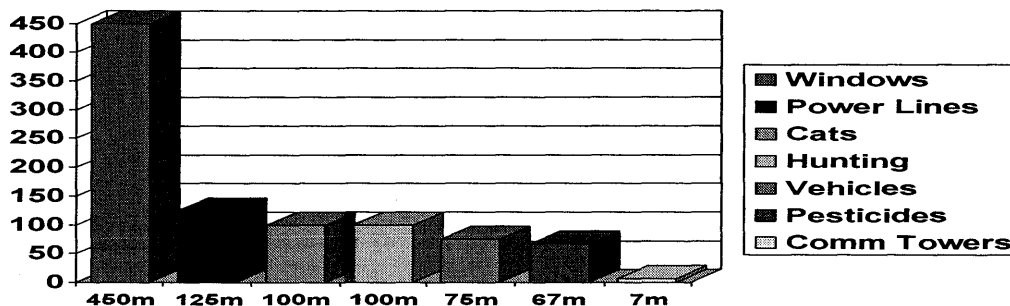
¹⁶ *Id.*

¹⁷ Dr. Kerlinger has written five books, including *How Birds Migrate*, is the author of dozens of published scientific papers, has received a letter of commendation from the FWS for his pioneering work, and is a member of the FWS Communications Tower Working Group (where he chairs the Research Committee).

¹⁸ See Paul Kerlinger, Ph.D., *Avian Mortality at Communications Towers: A Review of Recent Literature, Research, and Methodology*, Prepared for the U.S. Fish and Wildlife Service, Office of Migratory Bird Management (March 2000)(“*Kerlinger FWS Study*”), available at <http://migratorybirds,fws.gov/issues/towers/review/pdf>.

¹⁹ See Curry & Kerlinger web page; *What Kills Birds*, available at www.currykerlinger.com/birds.htm.

Causes of Bird Fatalities²⁰



Accordingly, based on available data, and when analyzed in relative terms, one cannot reasonably conclude that communications towers are a significant problem to the migratory bird population.

II. THERE IS NO EVIDENCE THAT UNLIT CMRS TOWERS BELOW 200-FEET HAVE AN ADVERSE EFFECT ON MIGRATORY BIRDS

As noted above, Sprint owns a substantial number of communications towers. An analysis of Sprint's tower inventory reveals that the overwhelming majority of towers utilized by the Company (and other licensees that collocate on Sprint's facilities) are below 200-feet above ground level. Indeed, many of Sprint's towers are below 100-feet.²¹ At the same time, available evidence states that most migratory birds generally fly at an altitude between 300 and 2,500 feet above ground level.²² Common sense thus suggests that even if one were to assume that

²⁰ *Id.* Curry & Kerlinger provides a range of avian mortality due to these factors on its website. The numbers depicted on this graph represent the midpoint of the ranges estimated by Curry & Kerlinger.

²¹ Sprint Sites USA owns and maintains over 5600 towers. Over 85 percent of these towers are less than 200 feet, and over 99 percent of these towers are less than 300 feet. Sprint estimates that approximately 34% of its towers are below 100 feet.

²² See Paul Kerlinger, Ph.D., *Avian Risk Assessment for Seven Mobile Telephone Towers in Rappahannock County, Virginia*, at 8 (July 31, 2003) ("Kerlinger Sprint Report"). Mean hourly altitudes usually exceed 1,200 to 1,500 feet above ground level. Filed with the FCC on Aug. 6, 2003, MTS No. 2001000288.

communications towers pose a threat to migratory birds, a large majority of Sprint towers are below the level at which such birds fly. Sprint submits that the same is likely true for numerous other wireless carriers and infrastructure providers.

In fact, the Fish & Wildlife Service has acknowledged the low risk posed by shorter towers when it adopted its voluntary *Tower Siting Guidelines* for the design of communications towers.²³ The voluntary *Guidelines* establish three preferred design criteria: (1) avoid towers higher than 200 feet above ground level; (2) avoid use of guy wires; and (3) avoid lighting.²⁴ The FWS further concludes that towers meeting these three criteria will “provide significant protection for migratory birds.”²⁵

Similarly, Dr. Kerlinger recently authored a report in which he concluded that the collision risk from CMRS towers under 200 feet “is virtually nonexistent” and that available research “fails to demonstrate significant risk, or even a low risk to birds, at short (<200 feet), unguyed and unlit towers”:

[A] vast majority of collision fatalities of birds occur at towers that are in excess of 500-600 feet in height, having guy wires and FAA lights. . . . Unguyed and unlit communications towers that are less than 200 feet in height . . . have never been shown to pose a significant threat to birds. . . . * * * Th[e] literature reveals that the communications towers that are responsible for the vast majority of avian fatalities are greater than 500-600 feet (152-183 m) in height.²⁶

As noted above, Dr. Kerlinger has also shared this conclusion with the FWS. In a March 2000 report based on his review of available research, Dr. Kerlinger concluded that “towers less than 500 feet have generally experienced very few kills, while under taller towers larger numbers

²³ See Memorandum from Jamie Rappaport Clark, FWS Director, to FWS Regional Directors (Sept. 14, 2000)(“*Tower Siting Guidelines*”). As the FCC notes, these guidelines were “not adopted through notice and comment procedures.” *Migratory Bird NOI* at n.44.

²⁴ *Id.*

²⁵ *Id.*

²⁶ Kerlinger Sprint Report at 2-3 and 7-8 (July 31, 2003).

of dead birds were found.”²⁷ Dr. Kerlinger further concluded that “the number of fatalities seems to be declining,” although he acknowledged that all explanations for this phenomena “are speculative.”²⁸ Even organizations with an interest in migratory birds have acknowledged that it is towers that are “over 199 feet in height, guyed and lit” that pose the greatest risk to migratory birds.²⁹ Although Sprint does not concur with the view that there is a clear correlation between communications towers and avian mortality, it is instructive that even the proponents of migratory bird protections acknowledge that a very significant number of mobile communications towers are not at issue.

If Sprint’s tower inventory can be used as a proxy for similarly situated wireless carriers, a relatively small percentage of commercial mobile radio service (“CMRS”) towers are over 200 feet in height, lit and guyed. Indeed, over 85 percent of Sprint’s towers are less than 200 feet. Sprint estimates that over 81 percent of its towers comply with the FWS *Tower Siting Guidelines*.³⁰

The Commission has previously acknowledged that it needs to ask three questions before imposing a new mandate:

First, is there a need for Commission action? Second, if we are persuaded that regulation would serve the public interest, what specific action should be taken?

²⁷ *Kerlinger FWS Study*, at 22.

²⁸ *Id.* at 23.

²⁹ See Forest Conservation Council, American Bird Conservancy and Friends of the Earth, Petition for National Environmental Policy Act Compliance at 10 (Aug. 26, 2002).

³⁰ There are a number of reasons why all towers cannot meet the *FWS Guidelines*. For example, Sprint has a small number of towers below 200 feet that must be lighted because they are located near an airport. Similarly, towers higher than 200 feet may be required where local zoning authorities will not permit Sprint to install additional sites (that would permit use of lower towers at each site). Topography and RF emission patterns also play a large role in tower design.

Third, what are the disadvantages of such action, especially as to network costs and additional burdens on providers, particularly smaller providers?³¹

Unless and until there is compelling evidence that the towers commonly used by licensees and tower owners present a significant threat to migratory birds, the Commission must not act in a manner that adds to the costs and delays already associated with the communications tower siting process.

The Commission must therefore proceed with extreme caution before initiating a rulemaking that might impose additional burdens on the construction of critical infrastructure. As noted above, any siting related measures that delay or impede the deployment of wireless infrastructure negatively impacts the ability of service providers to offer consumers the highest quality of service possible.

³¹ *CMRS Resale Order*, 11 FCC Rcd 9462, 9474 ¶ 18 (1996).

VI. CONCLUSION

For the foregoing reasons, Sprint respectfully requests that the Commission refrain from taking further actions unless and until it develops compelling evidence that communications towers pose a significant threat to migratory birds such that regulation may be necessary.

Respectfully submitted,

SPRINT CORPORATION

A handwritten signature in dark ink, appearing to read "L. Lancetti", written over a horizontal line.

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